

STANDARD OIL COMPANY (INDIANA)

ANNUALREPORT

1965

American Oil Company service station at Kayenta, Arizona.



ANNUAL REPORT

1965

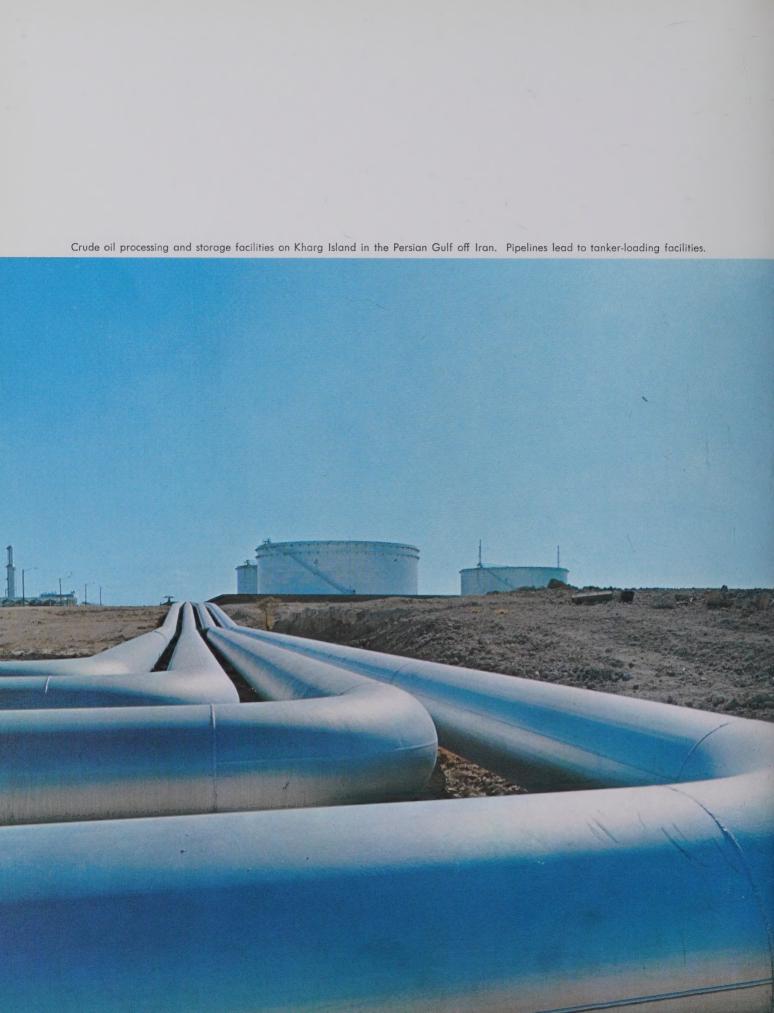


STANDARD OIL COMPANY (INDIANA)

THE YEAR IN BRIEF:		
Financial	1965	1964
Total revenues	\$3,063,161,000	2,856,074,000
Net earnings	\$ 219,272,000	194,851,000
Net earnings per share	\$ 3.10	2.75
Dividends paid	\$ 109,866,000	94,044,000
Dividends paid per share	\$ 1.55	1.325
Capital and exploration expenditures	\$ 475,485,000	487,813,000
Total assets	\$3,514,102,000	3,305,991,000
Book value per share	\$ 38.18	36.73
Working capital	\$ 550,413,000	512,144,000
Operating		*
Crude oil and natural gas liquids, barrels per day —		
Net production	456,339	404,608
Refinery input	777,406	733,843
Natural gas sold, thousand		
cubic feet per day	2,244,537	2,108,804
Refined products sold, barrels per day	840,077	791,928

CONTENTS

- 1 The Year in Brief
- 3 Report to Shareholders
- 4 Financial Review
- 7 Financial Statements
- 11 Subsidiaries and Affiliates
- 12 North American Production
- 16 North American Manufacturing
- 17 North American Chemicals
- 19 North American Transportation
- 20 North American Marketing
- 23 Foreign Operations
- 26 Research and Development
- 27 People
- 28 Ten-Year Summaries
- 32 Directors and Officers



Standard Oil Company (Indiana) recorded new highs for 1965 in operations, in revenues, and in earnings.

Net earnings of \$219.3 million were 12.5 per cent above the 1964 level, and established a new record for the Company. Per-share earnings advanced to \$3.10 from \$2.75 in the previous year. Dividends were increased, to \$1.55 per share, from the \$1.325 paid in 1964.

Gains were general throughout our operations, both domestic and foreign. Net production of crude oil and natural gas liquids increased more than 12 per cent, and refinery input rose approximately 6 per cent above the 1964 level. Sales of refined products in 1965 were more than 6 per cent above those for the previous year.

Sales of gasoline, our major product, again reached a new high, 4 per cent above the record level of 1964. A long-overdue improvement in domestic gasoline prices also took place during 1965, partially restoring some of the ground lost in a steady seven-year decline that began in 1958. While we hope that the prevailing price level — which is about the same as 1961 — will continue in 1966, this is beyond our control. Competition for business is intense, and we will continue to offer our customers superior products and services at competitive prices.

Additional gains were made in 1965 in sales of natural gas and chemicals, two of the fastest-growing areas of our business. With a 6 per cent growth in volume, natural gas sales totaled 2.2 billion cubic feet per day; sales of chemical products rose 29 per cent, to \$128 million.

Further progress was made in our foreign operations during the year. Commercial production began from the first of two major oil fields in the Persian Gulf, and we discovered an important oil field in the Gulf of Suez. Our new refinery in Brisbane, Australia, came on stream, and we entered into agreements to supply a 50,000-bar-rel-per-day, partly owned refinery to be built in India.

In view of the political and economic uncertainties associated with foreign operations, as evidenced by recent developments in Libya, and earlier in Argentina, we again increased our special reserve for possible losses abroad. In 1965, we deducted \$10 million from after-tax income to supplement this reserve and at year end had accumulated \$46.5 million in this account. Foreign investments now account for 16 per cent of total assets, including 5 per cent in Canada. While the conflict in Viet Nam is a matter of grave concern to us, as it is to all Americans, its present scope will have no appreciable effect on Company operations.

The rate of return on shareholders' investment rose for the fifth consecutive year to 8.3 per cent, compared with 7.6 per cent in 1964. This is still too low, but we expect to bring about further improvement in 1966.

For 1966, we expect an increase in U.S. demand for petroleum products of 3.5 to 4 per cent, with demand in the Foreign Free World rising close to 10 per cent. For our Company, we again anticipate increased production and sales, improvements in operations generally, and a further gain in earnings. As a result of an enlarged exploration program and planned expansion of facilities, our capital and exploration expenditures in 1966 are scheduled to exceed \$500 million for the first time.

We are cooperating with the United States government in efforts to improve the nation's balance of payments. While complying with the government's guidelines, we expect to continue our long-range foreign program as planned.

We should like to express appreciation to employees, dealers, and jobbers for their contributions to the collective effort during 1965, and to shareholders for their continued interest and support.

John E. Swearing Chairman

March 1, 1966

President

Earnings and Dividends

Consolidated net earnings for 1965 were \$219,272,000, highest in the Company's history, and up 12.5 per cent over the \$194,851,000 earned in 1964. Net earnings per share were \$3.10 on 70,794,742 shares outstanding at the end of 1965, and \$2.75 on 70,927,080 shares outstanding at the end of 1964.

In each of the first three quarters, regular dividends of 37½ cents a share were paid; in the fourth, the regular quarterly rate was raised to 42½ cents a share. For the year as a whole, dividends amounted to \$1.55 per share, compared with \$1.325 per share a year earlier. This was the seventh annual increase in total dividends paid per share. The total of dividends paid was \$109,866,000 in 1965, and \$94,044,000 in 1964.

Revenues, Costs, Expenses, and Taxes

Increased sales of refined products, natural gas, and chemical products, together with generally improved retail gasoline prices during the greater part of 1965, brought total revenues to a record \$3,063,161,000, up 7 per cent from the previous high established in 1964.

Total costs, expenses, and taxes also rose, to \$2,843,889,000, up 7 per cent. The higher level of operations, increases in payroll costs and taxes, and higher charges for depreciation and related items were the primary reasons for the increase.

The Company's reserve against possible future losses on foreign investments was further augmented by charges against after-tax income of \$10 million. This increased the balance in the reserve to \$46.5 million.

Total taxes rose to \$678 million, an increase of 15 per cent. This sum includes \$553 million in excise taxes collected from customers for government agencies, and income, property, and other taxes of \$125 million. The total of all taxes was equivalent to \$9.58 per share, or more than six times dividends paid in 1965.

Capital and Exploration Expenditures

In 1965, the Company's capital and exploration expenditures aggregated \$475.5 million, compared with \$487.8

million in 1964. Capital expenditures totaled \$356 million, of which \$212.5 million, or 60 per cent, represented expenditures for exploration and production activities. Exploration expenditures charged against current income amounted to \$119.5 million.

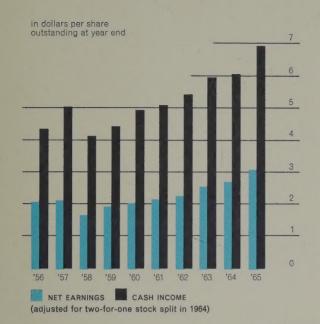
Financing

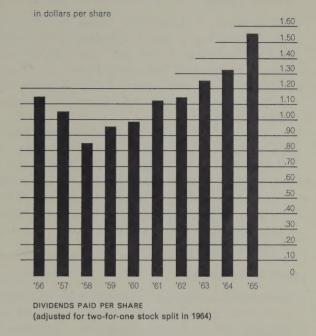
The Company's 1965 financing was affected by the government's program to improve the United States' balance of payments position. In addition to its desire to comply with government policy, the Company's management believed that failure by industry generally to cooperate would require imposition of mandatory controls which would be less favorable to the Company than the "voluntary" program. In view of foreign commitments for expenditures which could not be met in the future entirely from U.S. sources under the government's balance of payments program, a newly-formed Luxembourg subsidiary issued \$25,000,000 of 53/4 % bonds which were sold abroad in October. The proceeds of our foreign borrowing are assisting in financing our foreign requirements for funds sufficiently to enable us to proceed with projects which we believe will contribute to the Company's profitability while also satisfying the requirements of our own government.

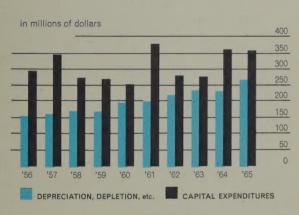
Indebtedness

Including \$12 million payable in 1966, our outstanding debt at year end amounted to \$362 million. Borrowings now represent approximately 10 per cent of total assets.

The outstanding debt excludes \$33.2 million principal amount of debentures reacquired to satisfy future sinking fund payments. The repurchased debentures consist principally of Thirty Year 3.20% Sinking Fund Debentures of Service Pipe Line Company. During 1965, Service reacquired \$5.1 million principal amount of its debentures. The total of such debentures available for future sinking fund payments now exceeds requirements through 1974.









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 INVESTMENT IN PROPERTIES (Thousands of Dollars)		eal s — 1965		investment mber 31, 1965	resta,	Investm December 3	
	Amount	%	Gross	Net	%	Net	%
Production	\$212,545	60%	\$2,517,031	\$1,338,073	56%	\$1,294,939	56%
Manufacturing	60,529	17	987,408	416,455	18	407,016	18
Transportation	14,912	4	506,186	195,575	8	205,426	9
Marketing	61,162	17	592,429	392,264	17	369,978	16
Other	6,892	2	57,983	27,220	1	24,797	1
Total	\$356,040	100%	\$4,661,037	\$2,369,587	100%	\$2,302,156	100%

Working Capital

The Company maintained its strong working capital position, with current assets exceeding current liabilities by \$550.4 million at year end. The ratio of current assets to current liabilities was 2.29 to 1, as compared with 2.56 to 1 a year earlier. Listed securities with a market value of \$117.8 million are not included in current assets.

Accounts and notes receivable increased \$40 million, to \$395 million, mainly as a result of higher sales. Inventories of crude oil and products were up \$21 million, to \$238 million. These inventories are stated at cost, mainly on the last-in, first-out method (LIFO), which is substantially below replacement cost. Materials and supplies inventories, stated at average cost or less, totaled \$36 million.

Retirement Plan

Retirement plan benefits are provided for employees on a contributory basis under trusteed plans and under contracts with an insurance company. Approximately \$538.4 million was available at year end for financing of retirement benefits. Of this amount, \$358.9 million represented the book value of assets held in trust funds, and \$179.5 million represented funds on deposit with the insurance carrier. The funds are solely for the payment of benefits under the Company's retirement plan. The trust funds are audited annually by independent accountants.

SOURCE AND APPLICATION OF FU (Thousands of dollars)	NDS	
Source of Funds	1965	1964
Net earnings	\$219,272	\$194,851
Depreciation, depletion, amortization,		
retirements, and abandonments	270,527	233,343
	489,799	428,194
Decrease in working capital		89,056
New borrowing	25,000	_
Miscellaneous	21,044	20,118
Total	\$535,843	\$537,368
Application of Funds		
Capital expenditures	\$356,040	\$360,636
Dividends paid	109,866	94,044
Acquisition of majority interest in		
Midwest Oil Corporation		35,620
Repayments on borrowings	15,166	25,591
Increase in working capital	38,269	_
Miscellaneous	16,502	21,477
Total	\$535,843	\$537,368

REPORT OF INDEPENDENT ACCOUNTANTS

Price Waterhouse & Co.

TO THE BOARD OF DIRECTORS OF STANDARD OIL COMPANY (INDIANA)

In our opinion, the accompanying consolidated balance sheet, the related statements of earnings and shareholders' ownership and the statement of source and application of funds present fairly the financial position of Standard Oil Company (Indiana) and its consolidated subsidiary companies at December 31, 1965, and the results of their operations and the supplementary information on funds for the year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year. Our examination of these statements was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Prince tolar Louise To.

Chicago, Illinois February 25, 1966

1965	1964
\$3,025,346,000	\$2,822,069,000
37,815,000	34,005,000
3,063,161,000	2,856,074,000
1,358,499,000	1,329,754,000
119,445,000	127,177,000
395,711,000	359,514,000
678,263,000	592,021,000
270,527,000	233,343,000
16,047,000	15,572,000
5,397,000	3,842,000
2,843,889,000	2,661,223,000
\$ 219,272,000	\$ 194,851,000
	\$3,025,346,000 37,815,000 3,063,161,000 1,358,499,000 119,445,000 395,711,000 678,263,000 270,527,000 16,047,000 5,397,000 2,843,889,000

CONSOLIDATED STATEMENT OF SHAREHOLDERS' OWNERSHIP

	Capital Stock		Earnings			
	Par Value	Capital in Excess of Par Value	Retained and Invested in the Business	Treasury Shares at Cost	Total	
Balance at December 31, 1964	\$913,418,000	\$79,669,000	\$1,679,820,000	\$(67,965,000)	\$2,604,942,000	
Net earnings			219,272,000		219,272,000	
Cash dividends at \$1.55 a share			(109,866,000)		(109,866,000)	
Adjustment arising from acquisition of pooled company		(473,000)	(1,250,000)	2,884,000	1,161,000	
Acquisitions and other disposals of treasury shares (net)				(12,876,000)	(12,876,000)	
Balance at December 31, 1965	\$913,418,000	\$79,196,000	\$1,787,976,000	\$(77,957,000)	\$2,702,633,000	

The Notes on page 10 are an integral part of these statements.

CONSOLIDATED BALANCE SHEET Standard Oil Company (Indiana) and Subsidiaries

December 31, 1965 and 1964

ASSETS	1965	1964
Current Assets		
Cash	\$ 109,680,000	\$ 110,075,000
U. S. Government and other marketable securities — at cost, which approximates market	187,113,000	118,902,000
Accounts and notes receivable	395,373,000	355,302,000
Inventories — Crude oil and products — at cost (mainly LIFO), below market	237,593,000	216,171,000
Materials and supplies — at or below cost	35,985,000	31,740,000
Prepaid expenses	11,325,000	7,761,000
	977,069,000	839,951,000
Investments and Sundry Assets		
Listed securities — at cost	14,865,000	15,073,000
Investments held for operating purposes — at cost	90,154,000	86,918,000
Long-term receivables and sundry assets	62,427,000	61,893,000
	167,446,000	163,884,000
Properties — at cost, less depreciation, depletion, and amortization	2,369,587,000	2,302,156,000
	\$3,514,102,000	\$3,305,991,000

The summary of properties on page 5 and the Notes on page 10 are an integral part of these statements.

LIABILITIES AND SHAREHOLDERS' OWNERSHIP	1965	1964
Liabilities Payable Within One Year		
Loans and debentures	\$ 11,980,000	\$ 19,752,000
Accounts payable	305,551,000	225,940,000
Taxes payable (including income taxes)	109,125,000	82,115,000
	426,656,000	327,807,000
Long-Term Debt	349,981,000	340,147,000
Total liabilities	776,637,000	667,954,000
Minority Interest in Subsidiary Companies	34,832,000	33,095,000
Shareholders' Ownership		
Capital stock — authorized — 100,000,000 shares; issued — 73,073,483 shares		
Par value at \$12.50 per share	913,418,000	913,418,000
Capital in excess of par value	79,196,000	79,669,000
Earnings retained and invested in the business	1,787,976,000	1,679,820,000
	2,780,590,000	2,672,907,000
Less — Capital stock held in treasury — 2,278,741 shares in 1965 and 2,146,403 shares in 1964 — at cost	77,957,000	67,965,000
Total shareholders' ownership	2,702,633,000	2,604,942,000
	\$3,514,102,000	\$3,305,991,000

Principles of Consolidation

The consolidated financial statements include the accounts of all domestic and foreign subsidiaries in which Standard Oil Company (Indiana) directly or indirectly owns more than 50 per cent of the voting stock, with the exception of Pan American Argentina Oil Company and an insurance company, Imperial Casualty and Indemnity Company. The investments in these companies are included in "Investments held for operating purposes" in the balance sheet.

Foreign currency items have been translated to U.S. dollars at appropriate rates of exchange.

Long-Term Debt	1965 (Thousand	1964 s of Dollars)
Standard Oil Company (Indiana) — 4½% Debentures due 1967 to 1983	\$180,490	\$187,000
3% Debentures due 1967 to 1979	23,370	24,150
2.90% — 3½% Promissory Notes due 1967 to 1979	68,167	73,287
Service Pipe Line Company — Thirty Year 3.20% Debentures due 1982, exclusive of \$32,256,000 principal amount repurchased as of December 31, 1965	27,144	32,207
Amoco Oil Holdings S. A. — 534 % Guaranteed Bonds Series A due 1985	25,000	
Calumet Nitrogen Products Company — 31/8 % Debentures due 1967 to 1980	10,125	10,850
All other indebtedness	15,685	12,653
Total long-term debt	\$349,981	\$340,147

Incentive Stock Option Plans

Under incentive stock option plans, key employees have been granted options to purchase shares of the Company's stock. The price of shares under options granted before May 2, 1963, is 95 per cent of the fair market value on the granting date, and the options normally extend for 10 years. The price of shares under options granted after May 2, 1963, is 100 per cent of the fair market value on the date of grant. These options normally extend for 5 years. The shares provided when options are exercised may be taken from authorized but unissued stock or may be reacquired shares. No options may be granted after May 1, 1973.

On January 1, 1965, options for 876,080 shares were outstanding under the plans. Options for 186,278 shares were exercised during the year at prices ranging from \$19.25 to \$29.125 per share. Options for 6,660 shares ex-

pired or were canceled. New options were granted for 2,000 shares at a price of \$42.625 per share. At the close of 1965, options for 685,142 shares were held by 276 executives; 322,690 shares were available for future grants.

Contingent Liabilities and Commitments

In 1963, the Federal Power Commission asserted jurisdiction over the price at which certain producing properties were sold in 1960 without its sanction. In 1964, a U.S. Court of Appeals held that the Commission had no such jurisdiction, but in June, 1965, the U.S. Supreme Court held that the sale was subject to FPC regulation and remanded the case to the lower court. It is anticipated that regulation of the sales price will not have a material effect on the Company's financial position.

On December 31, 1965, the Company had long-term leases extending beyond one year covering various service stations, tankers, office buildings, and other facilities, substantially all of which expire within 15 years. Annual rentals payable under these leases, without reduction for related rental income, are estimated at \$41,200,000.

Under long-term agreements with certain companies in which stock interests are held, the Company has guaranteed specified revenues from product shipments, and, under certain conditions, is obligated to provide funds to maintain working capital at specified minimums. No loss is anticipated from these obligations.

At December 31, 1965, the Company had substantial commitments entered into in the normal course of business for the acquisition or construction of facilities.

Taxes

The Consolidated Statement of Earnings on page 7 shows taxes charged to income totaling \$678,263,000 for 1965 and \$592,021,000 for 1964. The principal taxes, which include excise taxes on products sold, are shown in the table below.

1965 (Thousand	1964 s of Dollars)
\$553,358	\$504,508
37,003	34,303
23,424	20,462
43,826	9,966
20.652	22.502
20,652	22,782
\$678,263	\$592,021
	\$553,358 37,003 23,424 43,826

PRINCIPAL SUBSIDIARIES AND AFFILIATES Standard Oil Company (Indiana)

			
	Principal business	Principal areas of operation	Per cen
North America			
American Oil Company	Refining, transportation, and marketing	United States	100
Pan American Petroleum Corporation	Exploration and production of crude oil and natural gas	United States and Canada	100
Pan American Gas Company	Purchase, transportation, and sale of natural gas	Texas, New Mexico	100
Midwest Oil Corporation	Exploration and production	United States and Canada	52
Service Pipe Line Company	Pipeline transportation	United States	100
Amoco Chemicals Corporation	Manufacture and sale of chemical products	United States	100
Calumet Nitrogen Products Company	Manufacture of nitrogen products	Indiana	55
Tuloma Gas Products Company	Marketing of LP-Gas; manufacture and sale of fertilizers	United States	100
Imperial Casualty and Indemnity Company	Insurance	United States	100
American International Oil Company	Directs foreign operations	Outside North America	100
Latin America			
Pan American Argentina Oil Company	Exploration and production	Argentina	100
Pan American Colombia Oil Company	Exploration and production	Colombia	100
Pan American Venezuela Oil Company	Exploration and production	Venezuela	100
Pan American Trinidad Oil Company	Exploration and production	Trinidad	100
Amoco Trading International, Ltd.	Purchase and sale of oil	Outside North America	100
Europe			
Amoco International S.A.	Coordination and guidance of European activities	Switzerland	100
Amoco Oil Holdings S.A.	Financing of capital requirements of foreign operations	Luxembourg	100
Amoco Netherlands Petroleum Company	Exploration and production	Netherlands and North Sea	100
Amoco Hanseatic Petroleum Company	Exploration and production	German North Sea	100
Amoco U.K. Petroleum Ltd.	Exploration and production	United Kingdom North Sea	100
Amoco Norway Oil Company	Exploration and production	Norwegian North Sea	100
Amoco Italia, S.p.A.	Refining and marketing	Italy	100
Amoco (U.K.) Ltd.	Marketing	United Kingdom	100
Rheinische Mineraloel GmbH	Marketing	West Germany	100
Amoço Fina S.A.	Manufacture of lubricating oil additives	Belgium	50
Haniel-Amoco A. G.	Marketing	Switzerland	50
N.V. Petrochemie AKU-Amoco	Manufacture and sale of chemical products	Netherlands	50
Africa ————————————————————————————————————			
Pan American UAR Oil Company	Exploration and production	Egypt	100
Pan American Libya Oil Company	Exploration and production	Libya	100
Mozambique Pan American Oil Company	Exploration and production	Mozambique	80
Middle East			
Pan American International Oil Company	Exploration and production	Iran	100
Iran Pan American Oil Company	Exploration and production	Iran	50
Pan American Hadhramaut Oil Company	Exploration and production	Aden Protectorate	100
Pan American Mahra Oil Company	Exploration and production	Aden Protectorate	100
Far East and Australia			
Pan American Indonesia Oil Company	Exploration and production	Indonesia	100
Amoco Australia Pty., Ltd.	Refining and marketing	Australia	100
Furukawa Chemical Industries Company, Ltd.	Manufacture and sale of chemical products	Japan	35

NORTH AMERICAN OPERATIONS





Shown under construction, this drilling and producing platform has since been completed in Alaska's Cook Inlet.

PRODUCTION

Crude Oil

A new record was set in production of North American crude oil and natural gas liquids in 1965. Net production averaged 424,112 barrels per day, an increase of 7 per cent over 1964. This included an average of 34,470 barrels per day in Canada, up 16 per cent.

Natural gas liquids accounted for 15 per cent of the total North American production, compared with 13 per cent in 1964.

Proration continued to be rigorous in important areas where we have substantial interests. In Texas, regulated wells were restricted to 28.8 per cent of rated capacity, a slight improvement from the 28.2 per cent factor of the previous year.

Natural Gas

In response to growing markets, our 1965 net natural gas production was a record 2.4 billion cubic feet per day, an increase of 9 per cent.

The year was also marked by two large natural gas sales, each involving more than a trillion cubic feet of gas.

Early in 1965, we signed a 20-year contract committing natural gas from our leaseholdings in South Louisiana and adjacent offshore areas to Florida markets. The contract involves nearly 1.5 trillion cubic feet, most of which we own, and deliveries are expected to start in 1967.

In July, we signed the second largest natural gas contract in our history, agreeing to furnish up to 1.8

trillion cubic feet of gas to Trans-Canada Pipe Lines Ltd. over a 25-year period. The gas will come from holdings in the Marten Hills area, 160 miles north of Edmonton, Alberta. Deliveries will start in 1968.

Negotiations started in 1965 led to completion in January, 1966, of an intrastate sale by two of our companies to three Oklahoma utilities of over a trillion cubic feet of gas. The reserves are in the Red Oak-Norris field of the Arkoma Basin in Southeastern Oklahoma, where Pan American Petroleum Corporation, our wholly owned subsidiary, held 14 per cent of the uncommitted gas and Midwest Oil Corporation, our 52-per-cent-owned subsidiary, held 74 per cent. Deliveries under this 20-year contract start in mid-1966.

Oil and Gas Reserves

Our net proved reserves in North America increased again in 1965 despite record production, reflecting continued successful exploration and development activity.

Net additions to crude oil and natural gas liquids reserves, after production of 155 million barrels, totaled 79 million barrels, increasing our year-end total to 3,044 million barrels. This figure includes oil recoverable through secondary recovery methods only where projects are actually in operation.

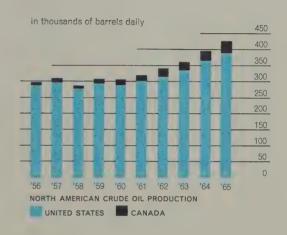
Natural gas reserves showed a net addition of 616 billion cubic feet, after production of 866 billion cubic feet, to reach a total of 19,196 billion cubic feet at year end.

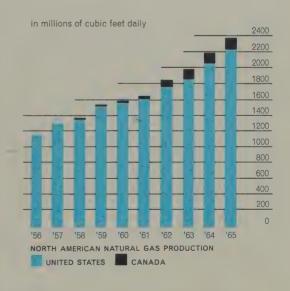
Offshore Alaska

In 1965, with three equal-share partners, we completed installation of a permanent, all-weather drilling and producing platform from which 32 wells can be drilled in developing the Middle Ground Shoal oil field in Alaska's Cook Inlet. Two eight-inch pipelines were laid from storage and wharf facilities on the east shore of the Inlet, near Nikiski, to the permanent platform. Construction was authorized for three more platforms—two at the Tyonek oil field and one at the South Middle Ground Shoal oil field. Oil discoveries in our rapidly developing Alaskan operations are detailed below.

Exploration

We drilled or participated in 263 wildcat tests in the United States and 77 in Canada, for a total of 340 wells. Our net interest equaled 242 wells.





NORTH AMERICAN OPERATIONS



The most significant discoveries include:

Alaska: Two new oil fields were added in our most active year thus far in the Cook Inlet Basin. In the Tyonek area, a well tested a total of 4,651 barrels daily from 400 net feet of pay sands. One zone produced at a rate of 2,455 barrels per day, the highest single-zone flow from any Alaskan well to date. A confirmation well produced over 2,000 barrels daily on a one-zone test.

The second new field is at South Middle Ground Shoal, where our discovery well flowed over 2,100 barrels daily from 389 feet of net pay. We are operators in each of these new fields, as well as in two earlier fields — one oil and one gas — which we discovered. Our net acreage in the Cook Inlet Basin is 96,700 acres.

Canada: We continued further exploratory work at the Nipisi field, discovered 200 miles northwest of Edmonton in 1964. The result was six stepout discoveries, including one wholly owned well and five in which we have 39.5 per cent interest. We hold 9,830 net acres in the area.

Also in Alberta, a four-mile stepout from our 1964 Gold Creek gas discovery found 107 net feet of wet gas pay and helped prove up part of 7,765 net acres of leases. Further drilling is planned. A joint-interest discovery in West Central Alberta south of our Pine Creek field tested about 15 million cubic feet of gas daily. It confirmed the potential of a portion of our holdings in the southwestern part of our 41% per cent net interest Whitecourt block.

Oklahoma: Eight wildcats found new oil and gas reserves in the Anadarko Basin. One of the wells potentialed for 20 million cubic feet of gas daily and another for 25 million cubic feet of gas daily. Both were rich in condensate. We hold more than 15,500 acres immediately surrounding the discoveries.

In the Arkoma Basin of Eastern Oklahoma, a dual-completion gas well potentialed for 31 million cubic feet per day; we have 42 per cent interest in the well and hold 2,000 net acres around it.

Mississippi: A half-interest discovery well at Bay Springs tested 648 barrels of oil per day. We have 2,435

net acres in the area, and rapid development is under way. We participated in 12 wells completed in 1965.

Kansas: A full-interest deep test on the east flank of the Hugoton field flowed 8 million cubic feet of gas and 144 barrels of oil daily from two zones. We have leasehold interest in 3,480 acres.

South Texas: A Goliad county wildcat found the multi-pay Live Oak Lake oil and gas field, where we have since drilled 12 wells for a total of 9 oil and 10 gas completions. Additional drilling is in progress.

Kentucky: We acquired half-interest in 12,600 acres of oil and gas rights underlying Camp Breckenridge, at a Federal sale. Eight gross wells were completed, and 12 wells were being drilled or tested at year end.

Louisiana Offshore: Multiple oil, gas, and condensate pays were found by six tests on four salt-dome structures, with net pay zones ranging from 24 to 354 feet. Two of the structures involve 13,500 acres in which we have 100 per cent working interest; the other two underlie 10,000 acres of one-half interest leases.

We also made contributions of money or acreage to 510 exploratory tests in North America drilled by other operators, as a means of evaluating many of our own leases.

Undeveloped Acreage

At year end, we held 9.5 million net acres of undeveloped leases in the United States, and in Canada we held 3.2 million acres of leases and 35 million acres of reservations and permits.

In Alaska, we acquired 160,000 acres in the Cook Inlet, Bristol Bay Basin, and along the North Slope. Along the important Smackover Trend extending from East Texas into central Alabama, we obtained 157,000 acres of leases. Other desirable acreage was acquired elsewhere in the United States and Canada.

On the Grand Banks off the coast of Newfoundland, an extensive seismic and core-hole drilling program was carried out on a 31-million-acre block which we hold jointly with another company.

Development

In 1965, we took part in drilling 1,532 development wells, exceeding last year's record of 1,421. Our net interest was equal to 1,063 wells. Following are the principal areas of development, showing our net interest wells:

Arkoma Basin, Eastern Oklahoma: With development of new markets, activity was accelerated. During the year, we completed 18 gas producers, bringing the number of our wells in the Basin to 65.

Anadarko Basin, Northwestern Oklahoma and Texas Panhandle: We completed 52 gas producers and 24 oil wells in 1965, bringing our total to 721 producing wells in this prolific basin.

Offshore Louisiana: A 12-well, self-contained platform was installed at Eugene Island Block 275. Drilling



Several West Texas oil fields are supplied water for waterflooding from this central pump station at Goldsmith.

is continuing. At Ship Shoal Block 28, in which we have 14 per cent working interest, drilling substantially increased natural gas production.

Hackberry, East and West fields, Southern Louisiana: A producing rate of 14,000 barrels of oil per day was achieved after successful completion of 7 oil wells and 1 gas well which extended the producing area.

Pine Island field, Northern Louisiana: A record 324 wells were completed in this shallow producing field.

High Island field, Texas Gulf Coast: 16 wells were completed, adding 730 barrels per day to production in this field.

Spindletop field, Texas Gulf Coast: 22 producers were completed in 1965 to extend production in this famous field. Net production is now at 5,500 barrels per day.

Smyer field, Northwestern Texas: 13 completions significantly extended productive limits of this field in Northwest Texas.

Basin Dakota area, Northwestern New Mexico: A total of 61 wells was completed with only one dry hole. We now have completed about 150 of the estimated 297 wells needed to fulfill the terms of a gas sales contract which became effective in 1964. More drilling is planned for 1966.

Denver Basin fields, Northeastern Colorado: The fifth successful year of development in fields under secondary recovery was completed, with 11 producers. Drilling was in "trap" areas which would not be drained by normal field development wells.

Canada: 15 oil wells were completed in Swan Hills field in 1965, 6 in the new Nipisi field, and 6 in the Ante Creek field.

A plant construction and expansion program was completed in 1965 at a net cost of more than \$24 million. Five new plants were built, and a number of others were modified over a two-year period. The largest new plant completed in 1965 was the Beaver Creek Phosphoria plant in Wyoming, which went on stream in March. It produces dry sweet gas, stabilized condensate, and sulfur.

Completion of our plant expansion program increased the total daily gas processing capacity of plants that we operate to 2.2 billion cubic feet, and total production of natural gas liquids to 78,800 barrels daily. Sulfur production has been increased to 700 long tons daily. We have a net interest of approximately 50 per cent in this capacity and production.

At the end of 1965, we owned an interest in 50 gasoline and cycling plants, and we are the operator for 29 of them.

At the Elk Basin field, Wyoming, installation of a computerized automation system was well along at year end. Completion is scheduled this spring. Representing the most advanced form of oil field automation, it will control production from 140 wells, and will serve 13 production batteries and extensive waterflood facilities. The field-wide supervisory control and telemetering system will detect equipment failures or adverse operating conditions almost instantaneously, reducing downtime. Improved methods for collecting and processing operating data will be provided.

In 1965, we joined in forming 38 producing units as a preliminary to secondary recovery operations. During the year, we also took part in starting 43 secondary recovery projects. We now participate in 353 such projects, of which we operate 162.

NORTH AMERICAN OPERATIONS



MANUFACTURING

For the fifth consecutive year, our 12 domestic refineries set a throughput record, processing 756,516 barrels a day of crude oil and natural gas liquids. This was a 5 per cent increase over 1964.

Seven of our 14 catalytic cracking units were modified to take advantage of recent technological advances, contributing to another year of record gasoline production. This improvement program will be continued in 1966, with modifications scheduled for four additional units.

We continued to be a leader in the use of computers to guide and control refinery operations. Concepts tested at Texas City, where one central computer system monitors the operations of all major process units and oil inventories, are now being extended to our Whiting and Salt Lake City plants. Plans have been firmed to replace individual process control computers with central refinery systems. This will not only achieve large economies but will also centralize process information for tighter control of interrelated operations.

New data communications links have been established between our Whiting technical computing center and a number of our other refineries to give those loca-





<mark>/acuum tower of pipe still at Texas City, Texas (top);</mark> atalytic cracking unit at Neodesha, Kansas (bottom).

tions access to very large technical computers for their more complex problems.

The year marked the completion of a number of construction projects and the start of others.

At Texas City, construction was essentially completed on units permitting the refinery to generate its own electricity and steam. An Ultraformer for upgrading gasoline was expanded, and a new unit for desulfurizing naphtha was placed in operation. Work was started on a central shop to consolidate maintenance facilities.

At Whiting, a hydrogenation unit was built that eliminates the need for acid and clay treating of lubricating oils. Work progressed on converting an existing unit to a 33,000-barrel-a-day facility for desulfurizing furnace oil; a portion of the converted unit is also being modified to isomerize butane, thus enlarging our alkylation capacity for upgrading motor fuels.

In addition to the construction and revamping of larger units, a continuous program of many minor improvements added to our efficiency. These were factors in upgrading operations at Wood River, Casper, and Sugar Creek.

During the year, our Yorktown refinery began processing Middle Eastern crude on a regular basis, utilizing our production from Iran's Persian Gulf.



New styrene monomer plant at Texas City, Texas.

CHEMICALS

Production and sales of chemicals continued the rapid growth that has characterized this part of our business in recent years. Following a 37 per cent rise a year earlier, dollar value of products sold in 1965 increased 29 per cent, to \$128 million:

This gain was achieved primarily on volume. Sales of aromatic acids and derivatives, motor oil additives, and styrene in particular registered substantial increases.

Along with record-breaking operations, Amoco Chemicals Corporation, our chemicals subsidiary, laid the groundwork for further expansion.

At Decatur, Alabama, a major plant took shape with the building of facilities to manufacture 200 million pounds a year of dimethyl terephthalate and purified terephthalic acid, both important raw materials for polyester synthetic fibers. Completion of the plant is expected in 1966. NORTH AMERICAN OPERATIONS



At Joliet, Illinois, where Amoco Chemicals has its largest plant, the first commercial unit in the United States to make purified terephthalic acid was brought on stream with a capacity of 40 million pounds a year.

At Texas City, construction was completed on a styrene monomer plant with an annual capacity of 250 million pounds. Styrene is used in the manufacture of synthetic rubber and polystyrene plastics.

Also at Texas City, work began on a paraxylene plant with a projected capacity of 225 million pounds annually. Paraxylene is a feedstock used in making dimethyl terephthalate and terephthalic acid.

At Wood River, Illinois, construction got under way on a petroleum additives plant. The new facilities will replace several older units and will double capacity to produce detergents, inhibitors, and other additives used in manufacturing improved motor oils and fuel oils.

Amoco Chemicals also substantially increased its manufacturing capacity for polybutenes, by debottle-necking and modification of the manufacturing process, to over 150 million pounds a year. Its polybutene plants are at Wood River, Illinois; Yorktown, Virginia, and El Dorado, Arkansas. Polybutenes are used in making adhesives, caulks and sealants, lubricating oil additives, and rubber goods; also as dielectrics and metal working lubricants.

During the year, the company set up a special division to develop and market chemicals used in crude oil production, storage, and transportation. A 50 per cent interest in Oxo Chemicals Company, which manufactures and markets oxo-alcohols, was sold.

Large gains were made in the manufacture and marketing of agricultural chemicals. Tuloma Gas Prod-

Anhydrous ammonia facility at Texas City.



ucts Company increased its ammonia sales 19 per cent, and its sales of mixed liquid fertilizers 48 per cent.

Plans were announced, in November, for a 1,500-ton-a-day ammonia fertilizer plant, one of the world's largest, to be located adjacent to a modern 600-ton-a-day plant in operation at our Texas City refinery.

During the year, Tuloma added 120 new retail outlets for ammonia in 11 states, bringing its total number to 612. Two additional refrigerated barges for delivering ammonia from Texas City to the Midwest were put into operation. A 30,000-ton refrigerated storage terminal for ammonia was completed at Burlington, Iowa, and another was substantially completed at Peoria, Illinois.

Tuloma began building two new plants for manufacturing liquid-mix fertilizers during the year; when finished, they will bring the number of these plants to 17. It added 115 sales outlets for liquid-mix fertilizers, increasing its total to 501.

TRANSPORTATION

Service Pipe Line Company, whose crude oil pipeline system is the nation's largest, continued to automate its facilities. More than 60 per cent of its crude receipts are now being handled by automatic custody transfer, and 85 per cent of its deliveries are being measured out of the system by meter.

Record shipments of 323 million barrels were made through our crude oil pipelines in 1965 to our own and other refineries. This amount was roughly equal to one barrel of oil out of every ten produced in the U.S.

Pipeline connection is laid to new field in Wyoming.



During the year, Service modernized a number of engine-driven stations along its East Texas trunkline, as well as stations at Freeman, Missouri, and Drumright, Oklahoma.

Our products pipelines delivered a record 121 million barrels of products.

Early in the year, connections were completed to all American Oil Company terminals along the new Colonial Pipeline system. We own 13.6 per cent interest in the line, which runs from near Houston, Texas, northeastward to the New York City area. Colonial's trunk line, which delivered 232 million barrels of products for various shippers in 1965, is currently being increased in capacity from 792,000 barrels a day to 960,000 barrels a day. Capacity of a number of lateral lines is also being expanded.

NORTH AMERICAN OPERATIONS



MARKETING

Record-breaking sales volumes and revenues, reflecting both increased demand for our refined products and firming of gasoline prices at higher levels, were achieved in 1965.

Refined products sales of 811,870 barrels a day represented a 6 per cent increase. Gasoline, which accounts for approximately half of our product volume, showed a gain of 4 per cent. Sales of fuel oils, our second major product line, were up 5 per cent. Substantial increases were also achieved for diesel fuels, jet fuels, and TBA items (tires, batteries, and accessories).

Gasoline prices, which had eroded steadily in recent years, advanced generally in March, and this gain was held.

Our sales volume improvement was achieved in keeping with our general plan that expansion represents true growth only when it contributes to earnings. In line with emphasis on profitable volume, the Company continued its selective marketing program, concentrating on establishing large-volume service stations and eliminating marginal accounts. It also concentrated on locating outlets at strategic points near the Federal interstate highway system, with particular attention to establishing full-facility truck stops to supply the expanding over-the-road transportation business.

Since the bulk of our sales are made on the service station driveway, the caliber of the independent businessmen handling our products and the kind of stations they run are of great importance to us. To equip them to do their job better, we now conduct 12 full-time training centers at which new dealers are schooled in customer service and business management. Already established operators are taking refresher courses. Two full weeks are spent in the classroom and one week at

Service stations like this one in Indiana serve motorists in the Midwest.



on-the-job training, in one of the most comprehensive programs of this sort ever used in our industry.

As another means of improving our contacts with customers and the service offered them, we have assigned full-time employees to a program of continuous monitoring of retail outlets to rate them on service, appearance, and salesmanship.

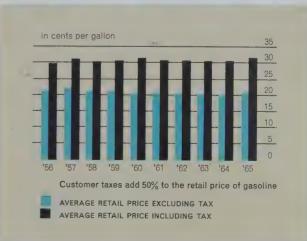
We again tested innovations that may help us and our dealers market more successfully. A major diagnostic car repair clinic was opened in Chicago. An American Oil Motor Club was organized and is being tested in the St. Louis area. A Harvey House restaurant in which we have 50 per cent ownership was opened in conjunction with an American Oil service station at Beloit, Wisconsin.

The number of credit-card accounts increased during the year to more than 4.7 million, and the number of persons carrying our credit cards to nearly 7.5 million. Arrangements were completed to permit patrons of the Best Western/Best Eastern motels and Albert Pickaffiliated hotels and motels to charge the cost of rooms, meals, and services on their American Oil credit-card accounts. Arrangements to test use of our credit cards were completed with the Ask Mr. Foster Travel Service.

Strong efforts were continued to maintain our position in the fuel oil market in the face of intense competition from other energy sources. Sales of Amoco Sta-Warm Heating Equipment, including many types of furnaces, burners, heaters, and boilers, were expanded to a nationwide basis. They will help develop new home markets for oil and retain present oil heat customers by providing new and efficient replacements for obsolete equipment. As another aspect of this effort, 45 central pipeline systems were installed to provide metered delivery of fuel oil to trailer-park homes.

Liquid-mix fertilizer, marketed by Tuloma, being applied on an Illinois farm.





NORTH AMERICAN OPERATIONS



Top: "Summer fill" fuel oil delivery near Barrington, Illinois, Lower: Class for new dealers in the Twin Cities, Minnesota, region.





We improved our position in the farm market, where the Company has traditionally been a leader. Approximately 200,000 rural accounts now have our Farm Fuel Final Filters on their storage tanks, as an added protection against moisture and contaminants.

During the year, five Farm Service Centers were in operation to test centralized selling of petroleum products, fertilizers, chemicals, and LP-Gas. Agents servicing rural customers were encouraged to take part in a new Farm Store program, by opening retail establishments offering motor oils, lubricants, agricultural chemicals, heating and storage equipment, and other merchandise.

Our sales to industry were helped by a variety of new products. The more significant were American Alkalube Oil, for large diesel engines; Amdex Grease, a new multi-purpose grease, and American Continuous Casting Lubricant. The rapid adoption of the continuous casting process by the steel industry is expected to create a good market for our lubricant.

An asphalt emulsion plant was built at Tampa, Florida, and an asphalt terminal was acquired at Linwood, Iowa.

LP-Gas Marketing

A 10 per cent gain was registered in sales of liquefied petroleum gas and natural gasoline.

During the year, Tuloma Gas Products Company, our principal LP-Gas marketer, adopted a uniform red, white, and blue color scheme to identify its facilities and equipment, and is now in the process of changing to the new colors. Wider use of the Tuloma name was started in retail operations.

The company, which markets primarily in suburban and rural areas, is also a major supplier of agricultural fertilizers (see page 18). Since demand for each line of products is in part seasonal, the company's peak sales of LP-Gas in winter and of fertilizers in spring and fall tend to complement each other.





Khuff field in Libya. Discovery well is in foreground,

HIGHLIGHTS

Crude oil production from the Darius field in the Iranian waters of the Persian Gulf increased substantially with our 50 per cent share averaging 33,447 barrels a day in the fourth quarter.

A major oil field, El Morgan, was discovered in the Gulf of Suez; production will start in 1966. In Libya's Sirte Basin, the Khuff field was developed and placed in production at the end of the year. Additional gas discoveries were made in the Netherlands, and new exploration rights were obtained in the North Sea off the United Kingdom and Norway.

Our new refinery in Brisbane, Australia, came on stream, and we entered into agreements to supply a 50,000-barrel-a-day, partly owned refinery to be built in India.

Marketing operations were expanded in Australia, Italy, Great Britain, and West Germany. The number of branded foreign retail outlets supplied by us increased 33 per cent to 948.

A description of developments in our overseas operations follows.

EXPLORATION AND DEVELOPMENT

Iran

Our 50 per cent share in crude oil production from the Darius field in the Persian Gulf averaged 23,084 barrels a day in 1965, and in the fourth quarter averaged 33,447 barrels a day.

Six development wells were drilled in the Cyrus field, our second major discovery in the Gulf, bringing the number of completed wells there to 10. Facilities will be constructed in 1966 to permit commercial production from this field.

Egypt

A substantial crude oil discovery in the Gulf of Suez opened the El Morgan field, and four subsequent step-out wells confirmed that it was of major proportions. Production is expected to start in the last half of 1966 when facilities now under construction are completed. Exploratory drilling continues.

In the Western Desert of Egypt where we hold rights on 18 million acres, we spudded our first wildcat well late in the year.



FOREIGN OPERATIONS

Libya

In the Sirte Basin, three producing oil wells have been completed to open the Khuff field, and further development is in progress. Construction of separation and storage facilities and a 19-mile connection with a nearby pipeline were completed at year end, with actual production awaiting a government permit to produce and export 15,000 barrels a day.

Three exploratory wells were drilled, and one tested oil. Further drilling and seismic work are planned.

Hadhramaut and Mahra

A second exploratory well in the Northern Hadhramaut tested only minor amounts of oil and was abandoned. Seismic work and a core drill program were continued.

Mozambique

Five exploratory wells were drilled on the 30-millionacre concession area that we hold jointly with another company. Four had non-commercial shows of gas. A stepout well from one of three shut-in gas wells drilled earlier found several gas-bearing sands. Further evaluation drilling and seismic work are planned.

Netherlands

Three exploratory wells in which we hold 60 per cent interest were completed as gas producers, and a development well was drilled to extend our 1964 gas discovery in the province of North Holland. Applications for concessions covering our discoveries were filed with the Netherlands government.

North Sea

United Kingdom — New areas in the United Kingdom portion of the North Sea were opened for bidding in the last half of 1965, and the Amoco-British Gas Council Group was awarded 15 blocks totaling 739,000 acres. These, combined with concessions received in 1964, bring the Group's holdings to 2,827,000 acres. We hold 22 per cent interest in the most recently awarded blocks and 31 per cent of the earlier award.

Norway — The Amoco group of Norwegian and American companies, for which we are operator and

in which we currently hold 28.3 per cent interest, was awarded 10 blocks totaling 1,213,000 acres in the Norwegian part of the North Sea.

Germany — Four non-commercial exploratory wells were drilled in the North Sea off Germany, and we were participating in three tests at year end. We have a 10 per cent interest in the operation.

Indonesia

Late in the year, the first of a group of shallow exploratory wells was spudded to evaluate untested portions of our concession in central Sumatra. Nine earlier tests were dry.

Argentina

Negotiations were continued with the Argentine government in an effort to settle the dispute arising from its unilateral annulment of our production and development contract in 1963. Pending an agreement, we continued to operate the producing properties, and received partial payments covering out-of-pocket costs. This production, which we do not include in our consolidated figures, averaged about 28,000 barrels a day in 1965.

Colombia

Our 25 per cent share in production from wells in the Payoa and Corazon fields averaged about 3,600 barrels a day. Two development wells were drilled, bringing the total wells in which we have an interest to 23.

Venezuela

Six wells were drilled to develop further crude oil production in Lake Maracaibo Block 12. Our one-third interest in production there resulted in a net to us of about 5,500 barrels daily, up 1,600 barrels from 1964. An exploratory well to test the deep Cretaceous formation was spudded late in the year.

Trinidad

Seismic work was conducted on our offshore concession east of Trinidad. We expect to drill a wildcat well there during the last half of 1966.

MANUFACTURING AND MARKETING

Australia

In October, a 25,000-barrel-a-day refinery was completed and placed in operation on Bulwer Island near Brisbane. It manufactures a complete line of petroleum fuels and asphalt, using Middle East and Australian crudes as feedstocks.

The number of service stations operating under the Torch and Oval was increased from 250 to 343, and in the rural areas Amoco-brand depots increased from 64 to 133. Total product sales, including fuel oils, increased more than 30 per cent over 1964 levels.



Drilling in the Gulf of Suez, where a major discovery was made in 1965.



Brisbane, Australia refinery, shown under construction, is now in operation.

India

We reached agreement late in 1965 with the government of India and with the National Iranian Oil Company for construction of a 50,000-barrel-a-day refinery at Madras, India. We will own 13 per cent of the refinery and will supply crude oil from Persian Gulf production. A fertilizer plant in conjunction with the refinery is under consideration.

Italy

Sales of petroleum products increased 11 per cent in 1965. In addition to substantial fuel oil sales, we now have 464 outlets operating under the Torch and Oval in Italy, compared with 396 in 1964. At the Cremona refinery, new desulfurizing and reforming units were added. Steps to expand crude running facilities are continuing.

Pakistan

Construction of a 10,000-barrel-a-day lubricating oil refinery at Karachi for the National Refinery Limited was about 70 per cent completed at year end. We have crude supply rights, and are providing technical assistance for the project.

Switzerland

Haniel-Amoco A. G., our 50-per-cent-owned affiliate, which markets under the Torch and Oval in Switzerland, saw its operations essentially unchanged in 1965. The number of branded gasoline stations was increased from 31 to 39.

United Kingdom

Amoco (U.K.) Ltd. increased the number of service stations operating under the Torch and Oval in Great Britain from 16 to 65. Sales of lubricants and agricultural chemicals were substantially improved. Total product sales nearly doubled over 1964 levels.

West Germany

Our wholly owned company, Rheinische Mineraloel GmbH, began marketing under red, white, and blue colors and the brand name Adler (English equivalent, Eagle). The number of its branded service stations was increased to 76 from 53.

West Indies

West Indies Oil Company, in which we have 42 per cent interest, began constructing a 10,000-barrel-a-day refinery at Antigua, which is expected to be completed in 1966. We have crude supply rights.

CHEMICALS

Netherlands

N. V. Petrochemie AKU-Amoco, in which we own half-interest, started work on increasing the capacity of its Delfzyl plant from 40 million pounds to 60 million pounds a year. Its output of dimethyl terephthalate is used in making synthetic fibers.

Belgium

Amoco Fina, 50-per-cent-owned, set new records in sales volume and value of its lubricating oil additives and polybutene products. Its plant at Antwerp operated near capacity.

Japan

Operations of Furukawa Chemical Industries were at record levels. The company, in which we own 35 per cent interest, produces polyethylene, polybutene, and wire-coating varnish at a plant in Kawasaki.

RESEARCH AND DEVELOPMENT

Research expenditures in 1965 totaled approximately \$22 million. Applications were made for 258 U.S. and foreign patents, and 303 new patents were secured covering a wide range of inventions. We now own more than 2,400 U.S. patents and 1,700 foreign patents. Many of these in combination with our proprietary technical information and know-how are making a direct contribution to income as the result of licensing to other companies.

Our exploration and production research, which is directed by our Tulsa, Oklahoma, laboratories, gave continued attention during the year to improving recovery of oil from underground formations. A unique thermal-recovery method was patented, and several pilot projects were started in the field. Close study was given to the use of chemical additives to improve results of waterflooding.

In drilling research, an automatic control valve was developed to lessen the danger of blowouts. Work on a liquid-activated percussion drill, which imposes a hammer blow on top of a rotating rock bit, was promising. Studies in polymer chemistry led to better low-solids drilling fluids.

A wide range of research activities contributed to our ability to find oil. Digital processing was employed to achieve more effective interpretation of seismic data. Computer analysis of well log records increased our knowledge of rock formations. Palynology, the study of fossilized spores and pollen, was employed to help identify oil-bearing formations. Geochemical analysis of water from well tests, paleontology, and X-ray studies of well cuttings are other tools being used effectively.

At our Whiting, Indiana, laboratories, significant progress was made in the development of our improved Hydrocracking process for conversion of high-boiling gas oils into high-octane gasoline.

We continued to improve techniques for monitoring the quality of our products. A method developed a year earlier for predicting "road octane" — a measure of highway performance of gasolines as distinguished from laboratory performance — has now been incorporated into our manufacturing operations. An improved laboratory test is being used to evaluate the tendency of fuel components to form engine deposits.

There were a number of product advances. Several of our motor oils were further improved. A new heavyduty S-3 motor oil was formulated, which surpasses the highest requirements of manufacturers and the military

services for both gasoline and diesel engines. A special grease for use in universal joints won favor.

Our expanding research on industrial lubricants led to new hydraulic and circulating oils, a new "highalkaline" oil for large industrial and marine diesel engines, and special products for rolling and continuous casting of steel.

Evaluation of oil-burning equipment by our technical people played an important part in the Company's first nationwide marketing of Amoco Sta-Warm appliances. We continued to develop better fuel oils, and field tested a new low-cost, clean-burning residual fuel designed for industrial and institutional use.

An improved diesel fuel was developed with a new additive to insure flow in extremely cold weather.

Further research on road materials confirmed that adding asphalt to the rock base under pavements increases highway durability and reduces costs. Several states have acted on this information, using asphalt to replace as much as half the former rock base. In other asphalt research, it was proved that crop yields can be increased significantly when a thin layer of asphalt is placed below the soil surface to retain moisture.

As has been the case for many years, research was conducted on air and water pollution. The results of our earlier studies have been applied to contribute to the high standards maintained at our facilities, but we are continually looking for further improvements. In 1965, studies continued into automobile emissions from fuel evaporation and engine exhaust, and into ways to remove the last traces of oil from water used in refineries.

In another important area of research, our scientists strengthened our expanding chemical business through new discoveries. Their continued research and development work on our proprietary oxidation system has not only secured for us a dominant position as a supplier of terephthalic acid and dimethyl terephthalate to major polyester fiber producers in the U.S. but has made the process much sought after throughout the world.

Our chemical activities also saw the successful introduction of new types of ashless dispersants and improved inhibitors for motor oils. Beside contributing to the superior quality of our American motor oils, these secured significant new additive business, both domestically and abroad.

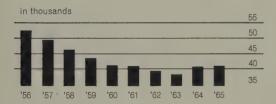
During the year, our AI-10 high-temperature polymer gained commercial acceptance as a high-temperature magnet wire enamel. Development work is being done internally and with potential customers to expand use of this new polymer in films, glass-impregnated laminants, and other plastics calling for high-temperature and high-strength characteristics.

A pilot plant, placed in operation in 1965, is now producing standard 4-by-8 sheets of a unique, high-temperature nonflammable foam. Panels of this foam, as well as a modified spray-on foam, are being tested by leading insulation and structural panel marketers.

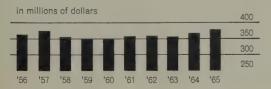




Top: Flow patterns of water injected underground are studied in secondary-recovery research in Tulsa. Lower picture: Oil field workers in Texas.



NUMBER OF EMPLOYEES AT YEAR END



WAGES AND BENEFITS

PEOPLE

Employees

The number of our employees grew only slightly in 1965. Reductions resulting from our continuing efforts to operate at the most efficient level helped counterbalance required increases in other areas of our expanding business.

Even with a largely stable work force, however, wage and benefit costs for the year increased \$16 million. Costs will be even higher in 1966 as the result of a general wage increase granted late in 1965 to non-managerial employees. The Company must be competitive in wages and benefits if it is to attract and retain skilled employees, but under conditions of increasing wage rates, it is imperative to utilize our work force effectively.

In the area of labor negotiations, our relationships were broadly harmonious. Except for one minor work stoppage, there were no strikes.

Recruitment efforts during the year were intensified, and the range of the program was broadened, in response to increasing competition for trained people. We succeeded both in attracting a number of outstanding graduates of leading educational institutions, and in obtaining the services of experienced personnel who came to us from other employment.

As in other years, we conducted an extensive program of communications with employees to broaden their understanding of our goals and problems, and of the importance to them of working for a profitable Company. We are fortunate in having thousands of dedicated employees who have contributed constructively to the Company's progress.

Stockholders

At year end, the number of Company shareowners had grown to 171,031, the largest in its history. This was about 10,000 more than a year earlier, and nearly 20,000 more than were on our rolls at the time of the announcement of our two-for-one stock split effective September 15, 1964. Our owners include 60,902 women, 46,992 men, 45,312 joint accounts, 12,963 trusts and other fiduciaries, 3,641 businesses, and 1,221 educational, charitable, and civic institutions.

TEN-YEAR FINANCIAL SUMMARY + Standard Oil Company (Indiana) and Subsidiaries

Dollar amounts in millions except where noted

SALES AND OTHER OPERATING REVENUES (including excise taxes)

Year	Refined Products	Crude Oil	Natural Gas	Chemical Products	Other Sales and Operating Revenues	Total Operating Revenues
1965	\$2,205	\$374	\$129	\$128	\$189	\$3,025
1964	2,038	386	125	100	173	2,822
1963	2,002	377	110	73	147	2,709
1962	1,955	375	97	61	139	2,627
1961	1,828	368	87	58	129	2,470
1960	1,828	345	79	56	121	2,429
1959	1,779	347	71	37	114	2,348
1958	1,736	305	59	27	106	2,233
1957	1,804	381	57	24	105	2,371
1956	1,712	341	48	18	98	2,217

FINANCIAL CONDITION AT YEAR END

Year	Total Assets	Working Capital	Working Capital Ratio	Liabilities Payable in Later Years	Borrowed and Invested Capital	Net Worth
1965	\$3,514	\$550	2.29 to 1	\$350	\$3,099	\$2,703
1964	3,306	512	2.56 to 1	340	2,998	2,605
1963	3,207	601	2.89 to 1	366	2,899	2,522
1962	3,083	534	2.98 to 1	384	2,820	2,428
1961	3,007	501	2.90 to 1	420	2,751	2,321
1960	2,893	583	3.34 to 1	424	2,650	2,218
1959	2,818	545	3.21 to 1	436	2,584	2,133
1958	2,751	580	3.50 to 1	459	2,527	2,058
1957	2,519	414	2.66 to 1	272	2,305	1,997
1956	2,422	460	3.05 to 1	299	2,205	1,897

EXPLORATION AND DEVELOPMENT COSTS

Year	New and Renewed Leases	Wells and Production Facilities	Dry Holes	Lease Rentals	Geological, Geophysical, and Other Exploration Expenses	Total Cash Expenditures for Exploration and Development
1965	\$63	\$150	\$52	\$13	\$54	\$332
1964	59	176	60	14	53	362
1963	46	134	46	12	45	283
1962	47	129	45	14	40	275
1961	55	175	42	13	37	322
1960	52	95	30	12	47	236
1959	58	117	25	12	40	252
1958	62	71	30	13	44	220
1957	99	100	36	12	33	280
1956	42	96	29	11	41	. 219

	NET EA	RNINGS	DIVIDE	NDS*	TAX	ES		
Total Revenues	Total	Per Share (in dollars)**	Total Value	Per Share (in dollars)**	Excise Taxes	Total Taxes Including Excise Taxes		
\$3,063	\$219	\$3.10	\$110	\$1.550	\$553	\$678		
2,856	195	2.75	94	1.325	505	592		
2,746	183	2.58	90	1.266	482	582		
2,656	162	2.29	81	1.149	479	554		
2,502	154	2.19	79	1.124	437	516		
2,462	145	2.06	70	.998	423	510		
2,372	140	1.98	68	.966	391	472		
2,251	118	1.66	60	.843	369	431		
2,391	152	2.14	75	1.055	361	447		
2,238	149	2.12	80	1.153	327	416		
	Cash Income			SHAREHOLDERS AT YEAR END		EMPL	OYEES	
look Value 'er Share in dollars)**	(net earnings plus depreciation, depletion, etc.)	Capital Expenditures	Exploration Expenditures Including Dry Holes	Shares Outstanding (in thousands)**	Number (in thousands)	Number at Year End	Wages and Benefits	
\$38,18	\$490	\$356	\$119	70,795	171	41,158	\$382	
36.73	428	361	127	70,927	161	40,724	366	
35.52	420	. 275	103	70,989	150	38,334	353	
34.21	383	278	99	70,971	154	39,189	358	
32.98	356	378	92	70,358	154	41,304	355	
31.63	344	252	89	70,120	160	41,706	344	
30.32	311	269	77	70,369	159	43,569	348	
29.08	290	270	87	70,783	152	46,033	352	
28.17	355	340	81	70,884	148	49,678	370	

70,623

143

52,012

359

Canceled and urrendered Leases

26.86

305

\$39 29 34

28 42 43

23 29

29 19 24 +Figures subsequent to 1962 exclude the Argentine subsidiary eliminated from the consolidated financial statements as of January 1, 1963.

81

* Dividends prior to 1964 include the market value on date of distribution of the Standard Oil Company (New Jersey) stock distributed as a special dividend.

292

** Adjusted for the two-for-one stock split in September, 1964.

A financial and statistical supplement to the 1965 Annual Report will be furnished upon request. Copies may be obtained from the Secretary, Standard Oil Company (Indiana), P.O. Box 5910-A, Chicago, Illinois 60680

EVDI	ORATION	AND	DEVEL	ODMENT
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	Net Producing of	and Prospective A	Acreage at Year En	d (in thousands)	Net Wells Drilled			
	Producing Leas	ses	Undeveloped Leases		Exploratory			
Year	United States	Canada	United States	Canada	Oil	Gas	Dry	
1965	2,298	479	9,539	3,197	33	33	186	
1964	2,259	412	11,758	3,591	42	43	253	
1963	2,092	262	11,234	3,174	40	28	245	
1962	1,998	261	13,758	3,428	34	36	150	
1961	1,900	191	15,516	2,764	26	51	131	
1960	1,726	98	12,761	1,984	16	41	139	
1959	1,691	182	11,644	1,836	22	30	118	
1958	1,641	63	12,572	1,431	20	32	135	
1957	1,568	60	13,097	935	34	25	136	
1956	1,523	53	13,225	542	24	22	98	

PRODUCTION

Net Production of Crude Oil and Natural Gas Liquids (thousands of barrels per day)

Year	Texas	Wyoming	Louisiana	Oklahoma	New Mexico	Kansas	Other U.S.
1965	202	58	52	19	19	14	26
1964	191	54	48	17	16	. 13	26
1963	180	44	45	14	15	12	25
1962	166	45	38	13	15	11	' 27
1961	155	47	33	13	18	10	25
1960	146	45	33	13	15	10	27
1959	155	44	32	13	12	10	31
1958	145	41	30	14	11	10	27
1957	167	35	31	16	11	11	27
1956	173	25	30	16	11	11	20

MANUFACTURING MARKETING

Refined Products Sold (thousands of barrels per day) Crude Running Gasoline Capacity Refinery Home Heating Oils, Kerosene, Diesel Oils (including (year end) Input Residual Fuel Oil Other natural Year (thousands of barrels per day) Products Total gasoline)

[†] Figures subsequent to 1962 exclude the Argentine subsidiary eliminated from the consolidated financial statements as of January 1, 1963.

						NET PROVED U.S. and Cana	RESERVES da at Year End	7	
Development Oil	Gas	Dry	Total	Gross Wells Drilled	Non-Company Wells to Which Contributions Were Made	Crude Oil and Natural Gas Liquids (thousands of barrels)	Natural Gas (billions of cubic feet)		
727	184	163	1,326	1,912	510	3,043,794	19,196		
699	170	132	1,339	1,892	471	2,964,760	18,580		
633	121	144	1,211	1,655	448	2,743,664	17,175		
737	141	141	1,239	1,642	622	2,617,525	16,653		
502	196	111	1,017	1,421	488	2,546,368	16,456		
589	74	104	963	1,416	640	2,346,627	15,358		
504	88	75	837	1,285	823	2,243,151	13,269		
340	98	65	690	1,011	715	2,188,506	12,982		
468	97	81	841	1,173	979	2,173,969	12,720		
525	81	74	824	1,224	1,139	2,139,666	12,227		
		1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	7						
Total U.S.	Canada	Argentina	Iran	Other Foreign	Total	Natural Gas (millions of cubic feet per day)	Oil Wells Owned, Net (year end)	Gas Wells Owned, Net (year end)	
390	34		. 23	9	456	2,374	16,136	3,536	
365	30		2	8	405	2,186	15,581	3,333	
335	27	_		8	370	1,966	13,865	2,979	
315	26	38		3	382	1,834	13,532	2,824	
301	19	36	_	2	358	1,617	12,943	2,631	
289	13	20			322	1,577	11,571	2,387	
297	- 9	2	_		308	1,509	11,164	2,268	
278	7		_		285	1,348	10,872	2,193	
298	10	_	_		308	1,298	10,722	2,085	
286	9		_		295	1,154	10,451	1,973	
1 2					TRANSPORTA	TION			
etail Outlets Sei	rved (year end)	Natural Gas	Crude Oil,						
Company Owned		Sold (millions of cubic feet	NGL, etc., Purchased	Crude Oil Sold	Pipelines Owned, Miles	Pipeline Traffic (million			
or Leased	Other	per day)	(thousands of b	parrels per day)	(year end)	barrel miles)			
23,100	8,900	2,245	757	368	16,645	178,587			
23,900	8,400	2,109	769	352	16,978	170,312			
25,100	7,900	1,920	764	345	16,844	170,976			
26,900	7,200	1,807	728	372	16,822	168,215			
27,900	7,600	1,642	706	350	17,543	170,957			
27,700	7,600	1,636	678	326	17,539	166,635			
28,400	8,600	1,567	650	325	17,609	155,332			
29,000	8,400	1,422	666	277	17,568	152,796			
29,900	7,700	1,391	717	342	17,366	156,451			
29,900	8,100	1,264	718	337	17,475	156,352			

DIRECTORS

John E. Swearingen Chairman of the Board

Robert C. Gunness

George V. Myers
Executive Vice President

Jacob Blaustein
President, American Trading and
Production Corporation

Homer J. Livingston Chairman, The First National Bank of Chicago

Lawrence A. Kimpton *Vice President*

L. William Moore
President, American Oil Company

Richard J. Farrell Vice President and General Counsel

Herschel H. Cudd President, Amoco Chemicals Corporation

L. Chester May Vice President Finance

Logan T. Johnston Chairman, Armco Steel Corporation

John S. Bugas Vice President, Ford Motor Company

F. Randolph Yost President, Pan American Petroleum Corporation

OFFICERS

Frank C. Osment Vice President

John E. Kasch Vice President

Blaine J. Yarrington Vice President

John T. Snyder, Jr. *Treasurer*

Richard M. McGowen Comptroller

Earl W. Russell Secretary

EXECUTIVE CHANGES

Effective September 1, directors of Standard Oil Company (Indiana) elected John E. Swearingen chairman of the board and Robert C. Gunness president. Mr. Swearingen, who continues as the Company's chief executive officer, had been president of Standard since 1958. Mr. Gunness had been an executive vice president since 1956.

Other executive changes during 1965 included the following:

Dwight F. Benton, an executive vice president and a director since 1949, retired on June 15 after more than 41 years of distinguished service.

F. Randolph Yost, president of Pan American Petroleum Corporation, was elected a director on August 18.

Richard J. Farrell, general counsel and a director, was elected a vice president on September 1.

Also on September 1, Frank C. Osment, John E. Kasch, and Blaine J. Yarrington were elected vice presidents with world-wide staff coordinating responsibilities. They report to Executive Vice President George V. Myers.

Jack M. Tharpe was appointed general manager of employee and public relations on March 1, replacing J. Howell Turner who also resigned as a director.

General Office

910 South Michigan Avenue, Chicago, Illinois 60680

Transfer Agents

The Chase Manhattan Bank, N. A.
One Chase Manhattan Plaza, New York, New York 10015

The First National Bank of Chicago 38 South Dearborn Street, Chicago, Illinois 60690

Registrars

First National City Bank 55 Wall Street, New York, New York 10015

Continental Illinois National Bank and Trust Company of Chicago 231 South La Salle Street, Chicago, Illinois 60690

Annual Meeting

The annual meeting of the Company's shareholders will be held on May 5, 1966, at the Whiting, Indiana, Community Center. A formal notice of the meeting, together with a proxy statement and proxy, will be sent to shareholders about April 1, 1966, when management will solicit proxies.

OUR MAJOR PRODUCTS

SERVING Gasolines

TRANSPORTATION

American Super Premium Gasoline Amoco Super Premium Gasoline (unleaded) American Regular Gasoline American Aviation Gasoline Standard Commercial Motor Fuel

Motor Oils

American Super Premium LDO Motor Oil Super Permalube Motor Oil Permalube Motor Oil Amolube Motor Oil Artex Motor Oil American Motor Oil (HD-M, S-1, S-3) American Outboard Motor Oil Stanolube HD Motor Oil

Tires, Batteries, Accessories

Amoco 120 Super Premium Tire Atlas tires, batteries, accessories

Jet Fuels

American Jet Fuel

Diesel Fuels

American Premier Diesel Fuel Amolex Diesel Fuel

Chassis Greases

Super Permalube Grease Amoco Lithium Multi-Purpose Grease American Molylith Grease Stanolube HD Moly Grease

Transmission Fluids

Amoco Automatic Transmission Fluid

Gear Lubricants

American Multi-Purpose Gear Lubricant Amoco Gear Lubricant

SERVING

THE HOME Furnace Oil

American Furnace Oil

Heater Oils and Kerosene

American Heater Oil American Kerosene

Liquefied Petroleum Gas

SERVING FARM AND INDUSTRY

Many of the products listed above also are used for farm and industry.

A selection of others follows:

Anhydrous ammonia
Balanced liquid fertilizers
Agricultural chemicals
Residual oils
Petrochemicals
Asphalts and road oils
Industrial oils and lubricants
White oils, waxes, petroleum solvents, additives, petrolatums, and greases

STANDARD OIL COMPANY < INDIANA >

Post Office Box 5910-A Chicago, Illinois 60680